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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Rec'd PCT/PTO 06 JAN 2005

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Applicant's or agent's file reference P/63634/U63		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)
International application No. PCT/GB 03/02984	International filing date (day/month/year) 10.07.2003	Priority date (day/month/year) 10.07.2002
International Patent Classification (IPC) or both national classification and IPC H04Q11/00		
Applicant MARCONI COMMUNICATION GMBH et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of    sheets.

- This report contains indications relating to the following items:
  - I    ☒ Basis of the opinion
  - II   ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV   ☐ Lack of unity of invention
  - V    ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI   ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  06.02.2004	Date of completion of this report  03.09.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Fleckinger, C  Telephone No. +31 70 340-3416  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/02984**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-18 as originally filed

**Claims, Numbers**

1-12 as originally filed

**Drawings, Sheets**

1-5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	2-6,8,11
	No: Claims	1,7,9,10,12
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following document:

D1: WO 01 45451 A (CORNING INC) 21 June 2001 (2001-06-21)

D2: NAGATSU N ET AL: 'ARCHITECTURAL ANALYSIS OF MULTIPLE FIBER RING NETWORKS EMPLOYING OPTICAL PATHS' JOURNAL OF LIGHTWAVE TECHNOLOGY, IEEE. NEW YORK, US, vol. 15, no. 10, 1 October 1997 (1997-10-01), pages 1794-1804, XP000703594 ISSN: 0733-8724

D3: GB-A-2 350 001 (FUJITSU LTD) 15 November 2000 (2000-11-15)

1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **independent claims 1,7,10** is not new in the sense of Article 33(2) PCT.

1.1 The document D1 discloses (the references in parentheses applying to this document):

A method for transmitting information from a start node to a target node (Fig. 1) in a wavelength division multiplex optical communications network (Fig.25, wavelength multiplexers) having a plurality of nodes, each of which includes a wavelength selective optical cross-connect having a plurality of switching fabrics (Fig.25), each switching fabric being provided for switching wavelength channels of a specific wavelength (72,82), the method comprising:

applying at least two wavelength channels having different wavelengths (p.11 l.13-16) but which are modulated with the same information ("redundant protection traffic", p.12 l.15) to an input of switching fabrics of the start cross-connect provided for these wavelengths;

transmitting the two wavelength channels to the target cross-connect (working traffic on wavelength  $\lambda_i$ , redundant protection traffic on wavelength  $\lambda_k$ );

dropping the wavelength channels at outputs of different switching fabrics of the cross-connect provided for different wavelengths (Fig.25).

The subject-matter of **independent claim 1** is therefore not new in the sense of Article 33(2) PCT.

1.2 The document D1 discloses (the references in parentheses applying to this

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document):

A node (Fig.25) for a wavelength division multiplex optical communications network comprising:

a wavelength selective optical cross-connect having a plurality of inputs for optical wavelength multiplex lines and a plurality of switching fabrics, wherein each switching fabric is provided for switching wavelength channels of specific wavelength (Fig.25) and

a plurality of add ports for adding data traffic (Fig.25)  
characterized by

a signal divider ("electrical bridge", p.5 l.26-30, Fig.3 item 30 ) for distributing an information signal to be added to at least two add ports of switching fabrics provided for different wavelengths.

The subject-matter of **independent claim 7** is therefore not new.

The selector of independent claim 10 being disclosed in D1 ("protection switch", p.5 l.26 - p.6 l.1, Fig.3 item 31), the subject-matter of **independent claim 10** is also not new.

**2 Dependent claims 2-6,8-9,11-12** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step.

The subject-matter of claims 9 and 12 is not new (D1: Fig.3, p.5 l.26-31).

The subject-matter of claims 2-6, 8, 11 is new in view of the documents cited in the search report. The additional features of claims 2-6 (see for example D3 p.11 l.11-33 and D2), 8, 11 come nevertheless within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject-matter of claims 2-6, 8, 11 also lacks an inventive step.